

### ABSTRACT

A direct resistance measurement probe for measuring corrosion levels and material loss. The probe comprises a hollow body having a resistive element at one end that is exposed to the environment. The probe can have an internal or external power source that is electrically connected to the resistive element. A meter measures the electrical resistance of the resistive element providing data from which corrosion rates may be ascertained. A temperature sensing device measures the temperature of the resistive element. A pressure sensing device measures the pressure of the environment that the resistive element is subjected to. The probe does not use a comparative or ratiometric reference element.